中文

SIPO

STATE INTELLECTUAL PROPERTY OFFICE OF THE P.R.C.

Title: Method of and apparatus for scheduling data transmissions in communication network

Application Number	98805844	Application Date	1998.04.07
Publication Number	1256675	Publication Date	2000.08.16
Priority Information	US08/835,632 1997/4/8		
International Classification	H04B7/26;H04Q7/22;H04Q7/38		
Applicant(s) Name	Qualcomm Incorporated		
Address			
Inventor(s) Name	E. G. Tiedemann Jr.;Chen Tao;Jou Yu-Cheun		
Patent Agency Code	31100	Patent Agent	li jalin

Abstract

A method of and apparatus for scheduling data transmissions in a communication network comprising at least one cell (2a to 2g) and at least one scheduled user (6a to 6e) improves utilization of the reverse link and decreases the transmission delay in data communication. The apparatus comprises a controller (92) for collecting status information for said communication network and for scheduling data transmissions from said at least one cell (2a to 2g) to said at least one scheduled user (6a to 6e). A memory (94) is connected to said controller for storing said status information, and a timer (96) is connected to provide timing signals to said controller (92). The timing signals enable said controller to perform scheduling of data transmission. Each remote station is assigned a maximum unscheduled transmission rate for the duration of the communication with a cell. A maximum scheduled transmission rate can be assigned by a channel scheduler (12) for scheduled transmission of data traffic at high rates. The maximum scheduled transmission rate is assigned in accordance with a set of system goals, a list of system constraints, and collected information on the status of the communication network. Data is partitioned in data frames and transmitted over the reverse link at or below the maximum scheduled transmission rate which have been assigned to the scheduled user.

Machine Translation   Close